

Clinical Laboratory Update

October 2021

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From the desk of the Public Health Laboratory Director

MHDL verified Ciprofloxacin susceptibility for *Neisseria gonorrhoeae* by E-test

In an effort to control the spread of multi-drug-resistant *Neisseria gonorrhoeae* and enhance surveillance, MHDL has included Ciprofloxacin, previously recommended antibiotic for treatment, in our *N. gonorrhoeae* antimicrobial susceptibility testing (GC-AST) panel. MHDL has completed a verification study to evaluate performance characteristics of Ciprofloxacin E-test for GC-AST using reference strains and clinical isolates. Interpretation of Ciprofloxacin minimum inhibitory concentration (MIC) breakpoints are: ≤ 0.06 Sensitive, 0.12-0.5 Intermediate, ≥ 1 Resistant (CLSI M100, 30th edition). These results will be used primarily for enhanced GC-AST surveillance, precision treatment in STD clinic, and will not be used to predict treatment failure. MHDL continues AST for Ceftriaxone, Cefixime and Gentamicin. AST results must be interpreted in the context of patients' clinical status. MMWR for CDC's STI Treatment Guidelines: <https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf>

MHDL published in peer-reviewed journal on COVID-19 coinfections with other respiratory pathogens

MHD Laboratory staff recently authored an article in the American Society for Microbiology's peer-reviewed journal, *Spectrum Microbiology*, [Respiratory Pathogen Coinfections in SARS-CoV-2-Positive Patients in Southeastern Wisconsin: A Retrospective Analysis](#). The study found that respiratory coinfections associated with SARS-CoV-2-positive patients were more common in young children. These findings will likely prompt additional investigation of polymicrobial infection associated with SARS-CoV-2 during seasonal respiratory pathogen surveillance by public health laboratories. Congratulations staff involved in COVID-19 testing and for study supports!

Links to related information & data:

[MHDL COVID-19 Testing website](#)

[MHDL COVID-19 Situation](#)

[WSLH Laboratory Surveillance Report](#)

Sexually Transmitted Infections

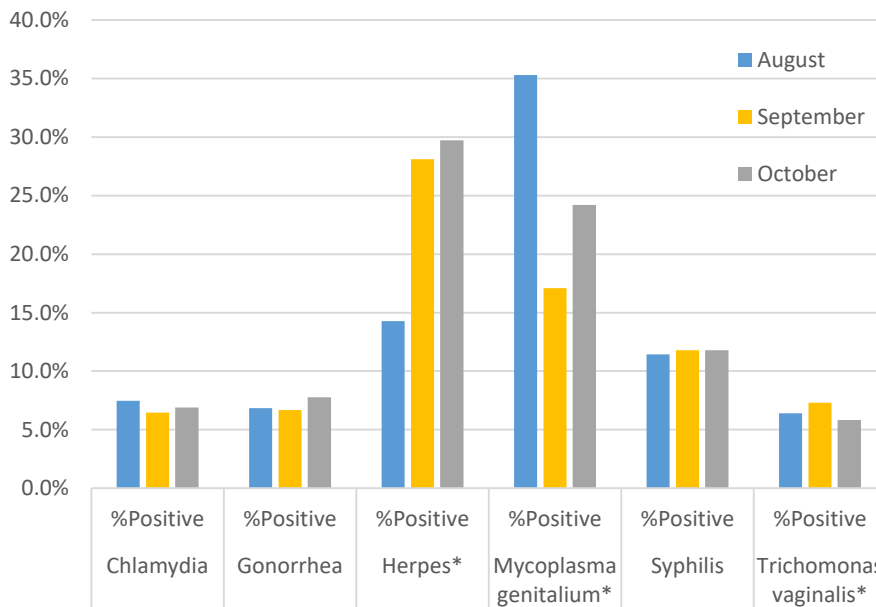


Figure 1: Percent positivity for specimens screened using molecular or serological assays for the given organism.

*Not reportable as per WI DHS 145.04 (3) (a)

Respiratory Infections

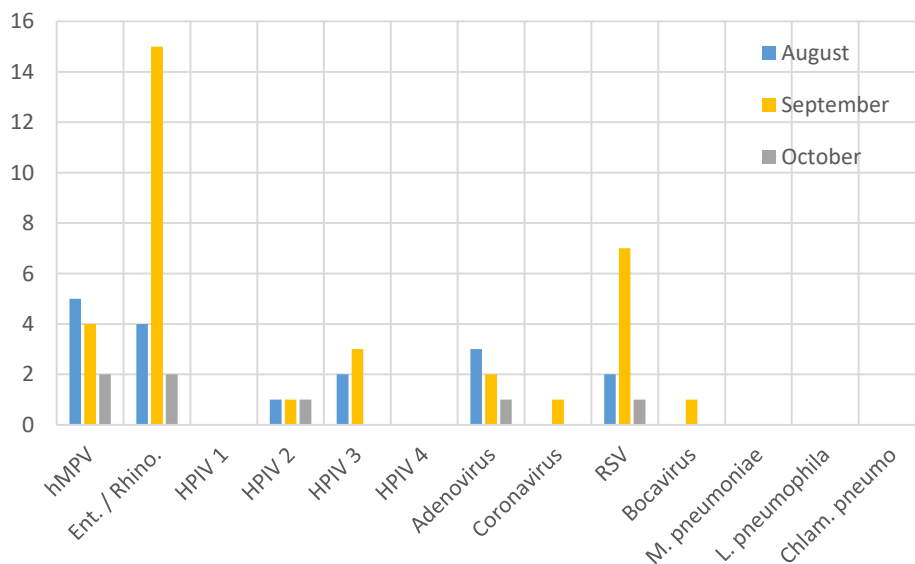


Figure 2: Respiratory pathogens detected using a Respiratory Pathogen Panel (RPP) and/or RT-PCR Influenza assay.

Connect with your health department:



New HIV Infections

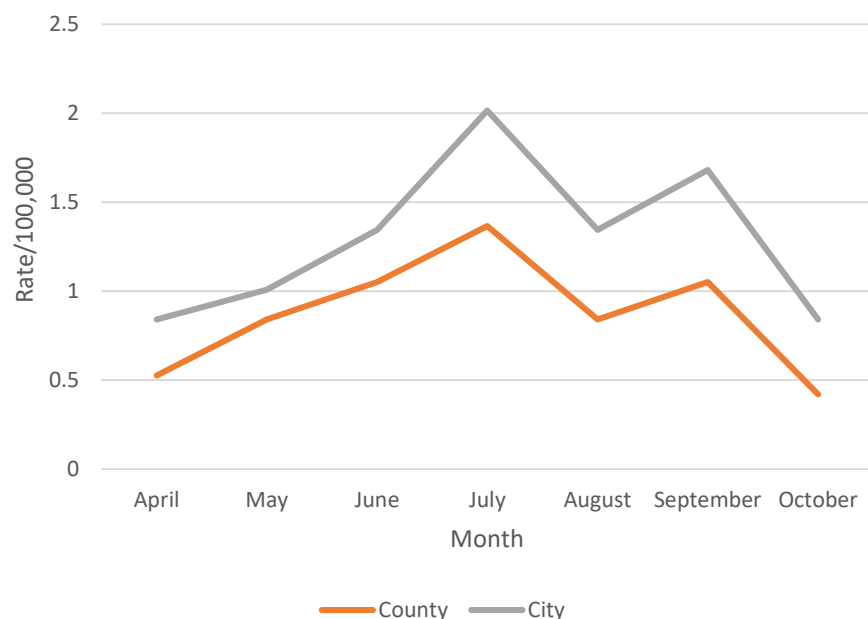


Figure 3: Monthly comparison of rate of new HIV infections in Milwaukee County and the City of Milwaukee, using data obtained from the Wisconsin Department of Health Services. Numbers are provisional and subject to change.

For statewide HIV data, visit:

<https://www.dhs.wisconsin.gov/hiv/data.htm>

Syphilis Surveillance

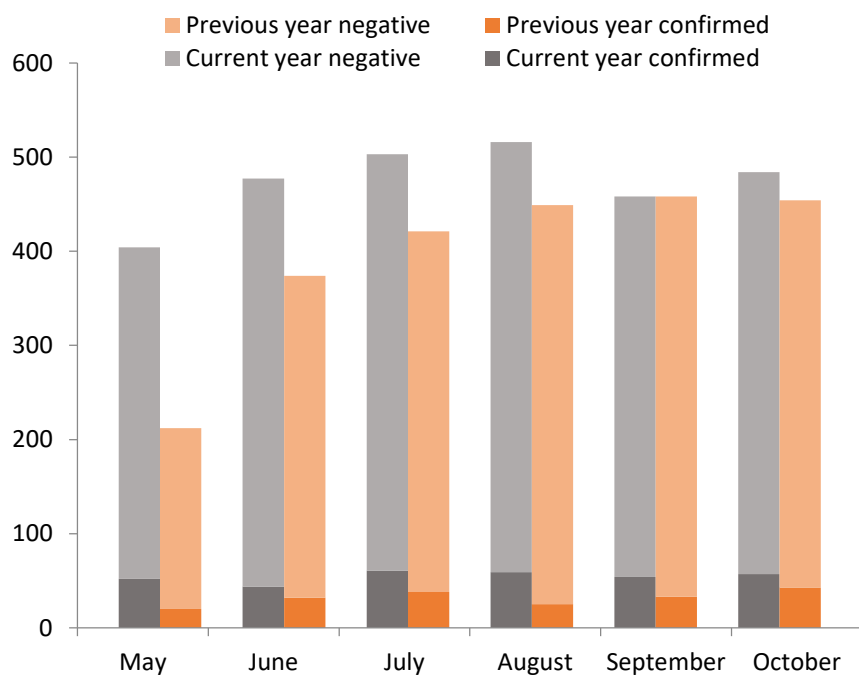


Figure 4: Monthly comparison of syphilis data with year over year comparisons.

Number of specimens screened at MHD, darker bars represent confirmed tests.

Gonorrhea Antimicrobial Susceptibility Testing

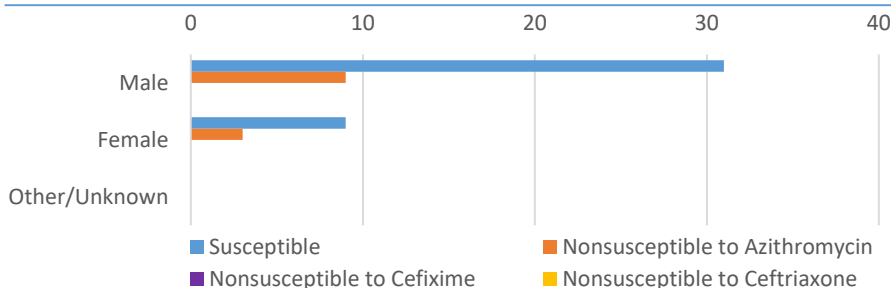


Figure 5: Antibiotic susceptibility profile of Gonorrhea isolates identified in males and females. In October 2021, 12 of 52 cultures tested were found to be nonsusceptible to Azithromycin according to CLSI guidelines. MHD tests for antibiotic resistance to Azithromycin, Ceftriaxone, Cefixime and Gentamicin.

Sexually Transmitted Infections by Source

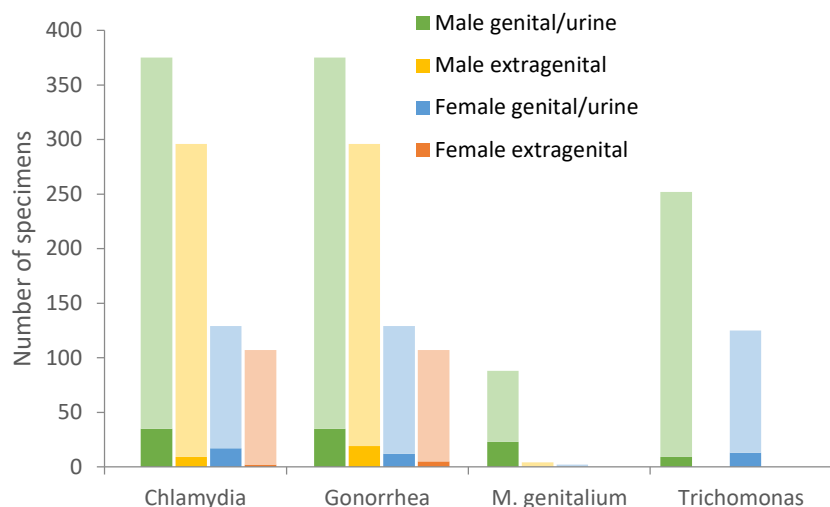


Figure 6: Distribution of STIs detected using NAAT. In October 2021 6.6% of male and 8.1% of female specimens screened were positive for Chlamydia. 8.0% of male and 7.2% of female specimens were positive for Gonorrhea. 25.0% of male and 0 of the 2 female specimens were positive for *M. genitalium*. 3.6% of male specimens and 10.4% of female specimens were positive for *Trichomonas*.

Note: Darker bars indicate positive specimens.

Viral Surveillance

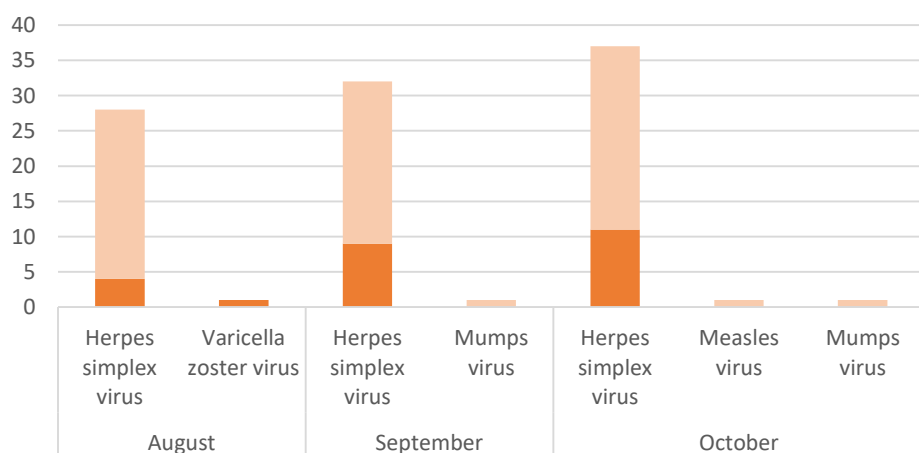


Figure 7: Specimens tested using molecular methods.

Note: Height of bar indicates number of specimens tested.

Darker bars indicate DNA/RNA detected by virus culture, real-time PCR and/or nucleotide sequencing analysis.

Legionella Testing

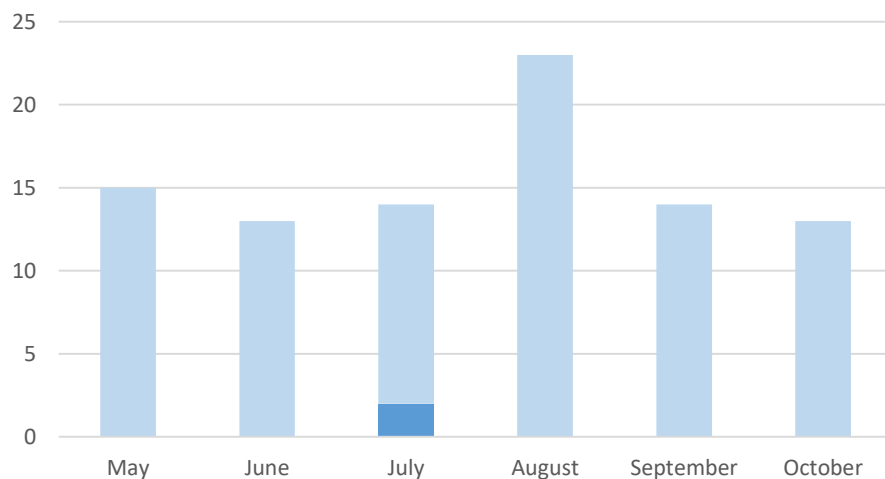


Figure 8: Clinical specimens tested using culture and molecular methods.

*MHDL is one of the **CDC ELITE** certified sites for environmental *Legionella* testing. See the Winter 2019 issue of the [APHL Bridges newsletter](#) for more information.

*Note: Darker bars indicate confirmed *Legionella pneumophila* by culture and/or real-time PCR.*